



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,324	08/18/2003	Takeshi Nishiuchi	60303.32	2834

54070 7590 11/18/2005

NEOMAX CO., LTD.
C/O KEATING & BENNETT, LLP
8180 GREENSBORO DRIVE
SUITE 850
MCLEAN, VA 22102

EXAMINER

SHEEHAN, JOHN P

ART UNIT	PAPER NUMBER
----------	--------------

1742

DATE MAILED: 11/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/642,324

Applicant(s)

NISHIUCHI ET AL.

Examiner

John P. Sheehan

Art Unit

1742

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/986,390.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/05, 3/05, 3/04, 3/03, 11/03, 9/05
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09/986,390, filed on November 8, 2001.

Information Disclosure Statement

2. The information disclosure statement filed August 18, 2003 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because:

- I. There is no statement of relevancy regarding references 60 and 63, which are not in English.
- II. Reference 5 has not been considered in that the patent number has been withdrawn and a copy of this reference is not available.

3. The information disclosure statement filed September 6, 2005 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because:

- I. There is no statement of relevancy regarding references 17 and 53, which are not in English.
 - II. Copies of references 59 and 60 were not submitted.
 - III. Citations 68, 69, 71, 73 and 74 refer to application serial numbers.
- However, each of the cited applications has either issued as a patent or

Art Unit: 1742

has been published and therefore should be listed as the patent or an application publication instead of the application (MPEP 609.04(a) (page 600-146, right column, second complete paragraph, Rev. 3, August 2005).

4. The remaining references cited in each of these IDS have been considered by the Examiner. Applicant is advised that the date of any re-submission of any item of information contained in these information disclosure statements or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a). The Examiner acknowledges receipt of the lengthy information disclosure statements filed August 8, 2003 and September 6, 2005, the additional information disclosure statements filed November 19, 2003, March 11, 2004 and the 2 information disclosure statements filed March 9, 2005. There is no requirement that applicants explain the materiality of English language references, however it has been held that the cloaking of a clearly relevant reference in a long list of references may not comply with applicants' duty to disclose, see Penn Yan Boats, Inc. v. Sea Lark Boats, Inc., 359 F. Supp. 948, aff'd 479 F. 2d. 1338. There is no duty for the Examiner to consider these references to a greater extent than those ordinarily looked at during a regular search by the Examiner. Accordingly, the Examiner has considered these references in the same manner as references encountered during a normal search of Office search files.

Specification

6. The disclosure is objected to because of the following informalities:

- I. The first paragraph of the specification does not reflect the current status of the patent application, 09/986,390.

Appropriate correction is required.

Claim Interpretation

7. Applicants are advised that, in view of the disclosure in paragraph 0176 (the last 3 lines) of the specification the claim language, “substantially excluding La and Ce”, e.g., claim 1, lines 12 and 13) has been interpreted to mean that the La and/or Ce content is about 0.5 at% or less.

Claim Rejections - 35 USC § 102/103

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1 to 20 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over EPO Document No. 1 158 545 (Kanekiyo, cited in the IDS submitted September 9, 2005).

Kanekiyo teaches a titanium containing rare earth nanocomposite permanent magnet (paragraph 0050 and 0080) wherein the hard magnetic phase has an average grain size larger than the soft magnetic phase (paragraph 0081) and having a composition that is the same as the alloy composition recited in applicants' claims (paragraph 0027). Kanekiyo teaches that the alloy is made by quenching a melt of the alloy and heat treating the resultant alloy to form the desired grain size (paragraphs 0108 to 0114). Kanekiyo teaches that the grain size of the hard magnetic phase is larger than the grain size of the soft magnetic phase (paragraph 0081) as recited in the instant claims. Kanekiyo teaches specific example alloys that are encompassed by the instant claims (Figures 9 and 10). Kanekiyo teaches that the titanium containing rare earth nanocomposite magnetic powder can be used to form a bonded magnet by mixing the titanium containing rare earth nanocomposite with any other hard magnetic material such as Sm-Fe-N or ferrite and a binder to form what applicants call a compound (paragraph 0121 and 0124).

The claims and Kanekiyo differ in that Kanekiyo does not necessarily teach all of the limitations recited in the instant claims.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the specific example alloy taught by Kanekiyo has a composition that is encompassed by the instant claims. In view of this, the alloy taught by the reference would be expected to possess all the same properties as recited in the instant claims, In re Best, 195 USPQ, 430 and MPEP 2112.01.

Art Unit: 1742

"Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, In re Best, 195 USPQ 430, 433 (CCPA 1977). 'When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' In re Spada, 15 USPQ2d 655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. In re Best, 195 USPQ 430, 433 (CCPA 1977)." see MPEP 2112.01.

Claim Rejections - 35 USC § 103

1. Claims 1 to 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ma et al. (Ma, US Patent No, 6,332,933, cited by the applicants in the IDS submitted August 18, 2003).

Ma teaches a rapidly solidified (e.g. column 5, lines 1 to 5) nanocomposite rare earth magnetic alloy having a composition that overlaps the alloy composition recited in the instant claims (column 2, line 39 to column 3, line 8) that is used to make bonded magnets. Ma teaches that the alloy has a soft magnetic phase having a grain size of 2 to 60 nm, a hard magnetic phase having a grain size of 10 to 100 nm and a boride component having a grain size of 1 to 30 nm (column 4, lines 3 to 8 and 45 to 52). Ma teaches that the alloy is ground to a powder having a particle size of 10 to 200 microns (column 4, lines 30 to 33). Ma teaches specific example alloys having compositions that are encompassed by the instant claims (column 8, Examples 6 and 7). Ma's Examples 6 and 7 contain 0.525% La, which is considered to be encompassed by the

Art Unit: 1742

instant claim language “substantially excluding La and Ce” which is defined in the specification as “about 0.5 at% or less” (specification paragraph 176, emphasis added by the Examiner). Ma teaches that the disclosed alloy is made by a process of melt spinning, that is, Ma’s alloy is rapidly solidified from the melt and then is optionally heat treated. This is the same process disclosed by the applicants to make the instantly claimed alloy and powder. Ma teaches that the bonded magnets are made by mixing the magnetic alloy powder with a binder such as a resin (column 9, lines 28 to 47) thus forming a compound as recited in each of applicants’ claims.

The claims and Ma differ in that Ma does not limit the average crystal grain size of the soft magnetic phase to be smaller than the average crystal grain size of the hard magnetic phase.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because Ma’s examples alloys have compositions that are encompassed by the instant claims and are made by a process which is similar to, if not the same as, applicants’ process of making the instantly claimed alloy. In view of this, Ma’ alloys would be expected to possess all the same properties as recited in the instant claims, including having the average crystal grain size of the soft magnetic phase smaller than the average crystal grain size of the hard magnetic phase, In re Best, 195 USPQ, 430 and MPEP 2112.01.

“Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, In re Best, 195 USPQ 430, 433 (CCPA 1977). ‘When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the

Art Unit: 1742

applicant has the burden of showing that they are not.' In re Spada, 15 USPQ2d 655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. In re Best, 195 USPQ 430, 433 (CCPA 1977)." see MPEP 2112.01.

2. Claims 1 to 20 are rejected under 35 U.S.C. 103(a) as obvious over Chang et al. (Chang, (IEEE Transactions on Magnetics, Vol. 35, No. 5 September 1999, cited in the IDS submitted August 18, 2003, 2003).

Chang teaches a specific example of an iron based rare earth nanocomposite magnet alloy having a composition that is encompassed by the alloy composition recited in the instant claims (page 3266, Table 1, the second listed alloy). It is noted that this example alloy contains La, however, when the subscript of the rare earth component (9.5) and the subscript of La (0.05) are multiplied the La content proves to be 0.475 or 0.475%. In view of that the fact that the specification defines the claim language "substantially no La or Ce" as "about 0.5 at% or less" (specification paragraph 176, emphasis added by the Examiner) the alloy composition recited in applicants' claims is considered to encompass the cited example alloy taught by Chang containing 0.475% La. Chang teaches that the disclosed nanocomposite alloy ribbon is used in bonded magnets (page 3265, left column, second paragraph, line 4) which would require mixing the magnetic alloy powder with a binder to form a compound as recited in applicants' claims.

Chang and the claims differ in that Chang does not teach all of the alloy properties recited in the applicants' claims.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the specific example alloy taught by Chang has a composition that is encompassed by the instant claims. In view of this, the alloy taught by the reference would be expected to possess all the same properties as recited in the instant claims, *In re Best*, 195 USPQ, 430 and MPEP 2112.01.

“Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, *In re Best*, 195 USPQ 430, 433 (CCPA 1977). ‘When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.’ *In re Spada*, 15 USPQ2d 655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. *In re Best*, 195 USPQ 430, 433 (CCPA 1977).” see MPEP 2112.01.

3. Claims 1 to 20 are rejected under 35 U.S.C. 103(a) as obvious over Japanese Patent Document No. 2002-64009 (Kanekiyo, cited by the Examiner in this Office action).

Kanekiyo teaches a titanium containing rare earth permanent alloy having a composition that overlaps the alloy composition recited in applicants' claims. Kanekiyo teaches that the alloy is made by quenching a melt of the alloy (see English language Abstract). Kanekiyo teaches specific example alloys that are encompassed by the instant claims (page 9, the Table, Alloys 2, 3 and 4). It should be noted that, based on a spot translation, the inventors of the Kanekiyo reference are Toshio Mitsugi and

Hirokazu Kanekiyo. Thus the inventorship of Kanekiyo and the instant application is different.

The claims and Kanekiyo differ in that Kanekiyo does not necessarily teach all of the limitations recited in the instant claims.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the specific example alloy taught by Kanekiyo has a composition that is encompassed by the instant claims. In view of this, the alloy taught by the reference would be expected to possess all the same properties as recited in the instant claims, *In re Best*, 195 USPQ, 430 and MPEP 2112.01.

"Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, *In re Best*, 195 USPQ 430, 433 (CCPA 1977). 'When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' *In re Spada*, 15 USPQ2d 655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. *In re Best*, 195 USPQ 430, 433 (CCPA 1977)." see MPEP 2112.01.

Double Patenting

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29

Art Unit: 1742

USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claims 1 to 20 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 7 and 8 of U.S. Patent No. 6,814,776. Although the conflicting claims are not identical, they are not patentably distinct from each other because '776's claims 7 and 8 are directed to a compound as recited in applicants' claims wherein the magnetic alloy composition overlap the magnetic alloy composition recited in applicants' claims. Therefore '776's claims 7 and 8 are considered to establish a prima facie case of obviousness. It would have been obvious to one of ordinary skill in the art to select any portion of the claimed ranges including the instantly claimed ranges from the ranges claimed in '776, particularly in view of the fact that;

"The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages", *In re Peterson* 65 USPQ2d 1379 (CAFC 2003).

Also, *In re Geisler* 43 USPQ2d 1365 (Fed. Cir. 1997); *In re Woodruff*, 16 USPQ2d 1934 (CCPA 1976); *In re Malagari*, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05.

12. Claims 1 to 20 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 to 6 of U.S. Patent No. 6,790,296 in view of the admitted known prior art disclosed in paragraphs 0003 and 0008 of the applicants' specification. The nanocomposite alloy composition recited in applicants' claims and '296's claims overlap. Further, the instant specification discloses that it is known in the art to use such nanocomposite magnetic compositions in bonded magnets (paragraph 0008 of applicants' specification) and that to make such a bonded magnet alloy powder is mixed with a binder such as a resin.

The instant claims and '296's claims differ in that the claimed alloy compositions overlap but are not the same and '296's are not directed to a compound, that is, a combination of the recited alloy powder and a binder.

Regarding the overlapping alloy composition, one of ordinary skill in the art at the time the invention was made would have considered such an overlap to establish a prima facie case of obviousness. It would have been obvious to one of ordinary skill in the art to select any portion of the claimed ranges including the instantly claimed ranges from the ranges claimed in '296, particularly in view of the fact that;

"The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages", In re Peterson 65 USPQ2d 1379 (CAFC 2003).

Also, In re Geisler 43 USPQ2d 1365 (Fed. Cir. 1997); In re Woodruff, 16 USPQ2d 1934 (CCPA 1976); In re Malagari, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05.

Art Unit: 1742

Further, one of ordinary skill in the art would have been motivated to mix '296's claimed alloy with a binder so as to form a compound that can be used to form a bond magnet as is well known in the art as taught in paragraphs 0003 and 0008 of applicants' specification.

13. Claims 1 to 20 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 5 and 20 of U.S. Patent No. 6,706,124 in view of the admitted known prior art disclosed in applicants' instant specification in paragraph 0003. '124 claims a bond magnet containing a nanocomposite alloy having the same composition as recited in the instant claims. Further, the instant specification discloses that it is known to make a bonded magnet by mixing a magnetic alloy powder with a binder such as a resin (applicants' specification, paragraph 0003).

The instant claims the claims of '124 differ in that the claims of '124 are not directed to a compound, that is, a combination of the recited alloy powder and a binder but rather are directed to a bond magnet.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made because in order to make the bonded magnet claimed in '124 one of ordinary skill in the art would have had to mix the magnetic alloy binder with a binder as disclosed in the admitted known prior art (instant specification, paragraph 0003) thus resulting in a compound as recited in applicants' claims.

Art Unit: 1742

14. Claims 1 to 20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 to 10 of copending Application No. 10/432,862 in view of the admitted known prior art disclosed in paragraphs 0003 and 0008 of the applicants' specification. The nanocomposite alloy composition recited in applicants' claims and '862's claims overlap. Further, the instant specification discloses that it is known in the art to use such nanocomposite magnetic compositions in bonded magnets (paragraph 0008 of applicants' specification) and that to make such a bonded magnet alloy powder is mixed with a binder such as a resin.

The instant claims and '862's claims differ in that the claimed alloy compositions overlap but are not the same and '862's are not directed to a compound, that is, a combination of the recited alloy powder and a binder.

Regarding the overlapping alloy composition, one of ordinary skill in the art at the time the invention was made would have considered such an overlap to establish a prima facie case of obviousness. It would have been obvious to one of ordinary skill in the art to select any portion of the claimed ranges including the instantly claimed ranges from the ranges claimed in '862, particularly in view of the fact that;

"The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages", In re Peterson 65 USPQ2d 1379 (CAFC 2003).

Also, In re Geisler 43 USPQ2d 1365 (Fed. Cir. 1997); In re Woodruff, 16 USPQ2d 1934 (CCPA 1976); In re Malagari, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05.

Further, one of ordinary skill in the art would have been motivated to mix '862's claimed alloy with a binder so as to form a compound that can be used to form a bond magnet as is well known in the art as taught in paragraphs 0003 and 0008 of applicants' specification.

This is a provisional obviousness-type double patenting rejection.

15. Claims 1 to 20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 8 of copending Application No. 10/484,072; and claim 36 of copending Application No. 10/381,005 each taken in view of the admitted known prior art disclosed in applicants' instant specification in paragraph 0003. Each of '072; and '005 claims a bond magnet containing a nanocomposite alloy composition that overlaps the alloy composition recited in applicants' claims. Further, the instant specification discloses that it is known to make a bonded magnet by mixing a magnetic alloy powder with a binder such as a resin (applicants' specification, paragraph 0003).

The instant claims and '072's claims and '005's claims differ in that the claimed alloy compositions overlap but are not the same and '072's and '005's claims are not directed to a compound, that is, a combination of the recited alloy powder and a binder but rather are directed to a bond magnet.

Regarding the overlapping alloy composition, one of ordinary skill in the art at the time the invention was made would have considered such an overlap to establish a prima facie case of obviousness. It would have been obvious to one of ordinary skill in

Art Unit: 1742

the art to select any portion of the claimed ranges including the instantly claimed ranges from the ranges claimed in '072 and '005, particularly in view of the fact that;

“The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages”, In re Peterson 65 USPQ2d 1379 (CAFC 2003).

Also, In re Geisler 43 USPQ2d 1365 (Fed. Cir. 1997); In re Woodruff, 16 USPQ2d 1934 (CCPA 1976); In re Malagari, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05.

Further, in order to make the bonded magnet claimed in each of '072 and '005 one of ordinary skill in the art would have had to mix the magnetic alloy binder with a binder as disclosed in the admitted known prior art (instant specification, paragraph 0003) thus resulting in a compound as recited in applicants' claims.

This is a provisional obviousness-type double patenting rejection.

16. Claims 1 to 20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 15 and 32 of copending Application No. 10/745,834 in view of the admitted known prior art disclosed in applicants' instant specification in paragraph 0003. '834 claims a bond magnet containing a nanocomposite alloy having the same composition as recited in the instant claims. Further, the instant specification discloses that it is known to make a bonded magnet by mixing a magnetic alloy powder with a binder such as a resin (applicants' specification, paragraph 0003).

The instant claims the claims of '834 differ in that the claims of '834 are not directed to a compound, that is, a combination of the recited alloy powder and a binder but rather are directed to a bond magnet.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made because in order to make the bonded magnet claimed '834 one of ordinary skill in the art would have had to mix the magnetic alloy binder with a binder as disclosed in the admitted known prior art (instant specification, paragraph 0003) thus resulting in a compound as recited in applicants' claims.

This is a provisional obviousness-type double patenting rejection.

17. Claims 1 to 20 are rejected under 35 U.S.C. 103(a) as being obvious over each of U.S. Patents 6,814,776; 6,790,296 and 6,706,124 for the reasons set forth above in the corresponding double patenting rejections.

The applied references have a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and

reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

Claims 1 to 20 are provisionally rejected under 35 U.S.C. 103(a) as being obvious over each of copending Application Nos. 10/432,862; 10/484,072; 10/381,005 and 10/745,834 which have a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the copending application, it would constitute prior art under 35 U.S.C. 102(e) if published or patented. This provisional rejection under 35 U.S.C. 103(a) is based upon a presumption of future publication or patenting of the conflicting application. Claims 1 to 20 are rejected over each of copending Application Nos. 10/432,862; 10/484,072; 10/381,005 and 10/745,834 for the reasons set forth in the corresponding provisional double patenting rejections.

This provisional rejection might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the copending application was derived from the inventor of this application and is thus not the invention "by another," or by a showing of a date of invention for the instant application prior to the effective U.S. filing date of the copending application under 37 CFR 1.131. This rejection might also be overcome by showing that the copending application is disqualified under 35 U.S.C.

103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

18. Claims 1 to 20 are directed to an invention not patentably distinct from the claims of commonly assigned copending Application Nos. 10/432,862; 10/484,072; 10/381,005 and 10/745,834 and U.S. Patents 6,814,776; 6,790,296 and 6,706,124 for the reasons set forth above in the corresponding double patenting rejections.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302). Commonly assigned copending applications and patents, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

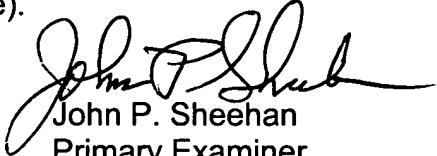
A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Sheehan whose telephone number is (571) 272-1249. The examiner can normally be reached on T-F (6:45-4:30) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


John P. Sheehan
Primary Examiner
Art Unit 1742

jps